

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/10/2009 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. All outstanding rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 8/10/2009.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, and 8 are rejected under 35 U.S.C. 102(c) as being anticipated by Ittel (US 2005/0058822).

Ittel discloses a fiber-reinforce thermoplastic matrix comprising a polyolefin-containing thermoplastic matrix, synthetic fiber such as polyamide and nylon fibers, and magnesium hydroxide and/or silica (claims 1, 3, and 5). The composition is used to prepare an article such as electrical casing (claim 21).

In light of the above, it is clear that Ittel anticipates the presently cited claims.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzemacher (US 5,827,906).

Metzemacher discloses a composition for use with cable (col. 1, line 25) comprising magnesium hydroxide surface), polymer such as thermoplastic olefins (col. 10, line 44), and optionally polyamide fibers (col. 3, line 55).

Metzemacher fails to exemplify a composition with said optional polyamide fibers.

Even so, it would have been obvious to one of ordinary skill in the art to utilize polyamide fibers in the composition taught by Metzemacher given that Metzemacher teaches that suitability of such fibers in its composition.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '570 (JP 11-106570, full English-language translation) in view of Metzemacher (US 5,827,906).

JP '570 discloses a resin composition comprising a polyolefin-polyamide resin composition that is mixed with rubber or resin as reinforcement (paragraph 0001), wherein the polyolefin-polyamide resin composition comprises 90-40 parts by weight (pbw) polyolefin, 10-60 pbw polyamide fibers having an average fiber diameter of 1 micron or less and an aspect ratio of 20-1,000, and 0.1-5.5 pbw per 100 pbw, per total of polyolefin and polyamide, silane coupling agent (abstract). Note Table 2 which has the polyolefin-polyamide resin composition mixed with NBR (nitrile butadiene rubber) or PE (polyethylene).

JP '527 fails to disclose the use of magnesium hydroxide in the composition, however, it is open to the use of other additives such as fillers (paragraph 0025).

Metzemacher discloses a composition comprising thermoplastic polyolefins, polyamide fibers, and magnesium hydroxide (see discussion in paragraph 5 above), wherein the magnesium hydroxide is used to impart flame retardance to polyolefin composition.

Given that JP '527 is open to the use of additives and further given that Metzemacher teaches that magnesium hydroxide is advantageously and successfully added to polyolefin compositions containing polyamide fiber in order to impart flame retardance, it would have been

obvious to one of ordinary skill in the art to add magnesium hydroxide to the composition of JP '570.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '570 (JP 11-106570, full English-language translation) in view of Metzemacher (US 5,827,906) and further in view of JP '464 (JP 11-302464).

The discussion with respect to JP '570 and Metzemacher in paragraph 6 above is incorporated here by reference.

JP '570 discloses the use of a filler such as "white carbon," but fails to exemplify or teach the use of silica.

Sugiyama et al teaches that silica is also known as "white carbon" (col. 2, lines 26-27).

Given that JP '570 teaches the use of a white carbon filler which is equivalent to silica as taught by Sugiyama et al, it would have been obvious to one of ordinary skill in the art utilize silica in the polyolefin-polyamide resin composition taught by JP '570.

8. Claims 1, 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464 (JP 11/302464, machine translation) in view of JP '963 (JP 2000-344963).

JP '464 discloses a resin composition for use in electric wire (paragraph 0001) comprising 90-99 wt % polyolefin and 1-10 wt % polyamide fiber having an average fiber diameter of 1 micron or less and an aspect ratio of 20-1,000 (paragraph 0017), and silane coupling agent (abstract).

JP '527 fails to disclose the use of magnesium hydroxide in the composition, however, it is open to the use of other additives such as fillers (paragraph 0026).

JP '963 discloses a polyolefin resin composition for use in a sheath of electric wires and teaches that flame-retardant inorganic particles such as magnesium hydroxide is useful (abstract).

Given that JP '527 discloses a composition suitable for use in electric wire that is open to other additives such as fillers and further given that JP '963 teaches polyolefin composition for use as sheath of electric wires advantageously includes magnesium hydroxide as flame retardant, it would have been obvious to one of ordinary skill in the art to utilize magnesium hydroxide in the resin composition of JP '464.

9. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464 (JP 11/302464, machine translation) in view of JP '963 (JP 2000-344963) and further in view of JP Sugiyama (US 4,082,909).

The discussion with respect to JP '464 and JP '963 in paragraph 8 above is incorporated here by reference.

JP '464 discloses the use of a filler such as "white carbon" (paragraph 0026) but fails to exemplify or teach the use of silica.

Sugiyama et al teaches that silica is also known as "white carbon" (col. 2, lines 26-27).

Given that JP '464 teaches the use of a white carbon filler which is equivalent to silica as taught by Sugiyama et al, it would have been obvious to one of ordinary skill in the art utilize silica in the composition taught by JP '464 and JP '963.

Double Patenting

10. Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7, 13, and 14 of copending Application No. 10/533,159 (published as US 2006/0241221).

US appl. '159 claims a method of producing a polyolefin resin composition, wherein the composition comprises polyolefin and polyamide ultrafine fibers-dispersed polyolefin resin composition comprising silica particles in a ratio of polyolefin to polyamide of 1:1 to 9:1 and a silane coupling agent.

US appl. '159 fails to claim a magnesium hydroxide, however, the claims of US appl. '159 due to open claim language "comprises" and page 20 of the specification of US appl. '159 teaches that magnesium hydroxide can be added. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970). Therefore, it would have been obvious to one of ordinary skill in the art to add magnesium hydroxide to the claims of US appl. '159.

11. Applicant's statement on page 5 of the amendment filed 8/10/2009 regarding the provisional obviousness-type double patenting rejections is acknowledged. If the following double-patenting rejection is the only rejection remaining in this application and if there is a provisional obviousness-type double patenting rejection in the later-filed copending application, per USPTO practice, the examiner will withdraw the rejection. See MPEP 804 (I) (B).

Response to Arguments

12. Applicant's arguments filed 8/10/2009 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that JP '570 fails to disclose in along list of additives magnesium hydroxide or flame retardant; (B) that the addition of large amounts of inorganic filler would increase the density and give a molded article poor visual appearance; and (C) that the present invention produces unexpected results with respect to colorability when a bromine-containing flame retardant is used in combination with magnesium hydroxide particles.

With respect to argument (A), JP '570 discloses that inorganic fillers can be added to its composition. Metzemacher discloses a polyolefin composition like JP '570 and teaches the suitability of an inorganic flame retardant such as magnesium hydroxide in such a composition.

With respect to argument (B), first, while JP '570 teaches that the addition of inorganic fillers can provide for a poor appearance of a molded product (paragraph 0002), it also teaches the addition of inorganic fillers (paragraph 0025). Furthermore, Metzemacher teaches the addition of magnesium hydroxide to polyolefin in amounts as low as 5 wt %, wherein such an amount would not be expected to significantly affect density or appearance. Second, the claims do not limit the amount of magnesium hydroxide in the composition.

With respect to argument (C), the instant claims do not require the presence of a bromine-containing flame retardant. Therefore, the data in the specification as originally filed is not probative. Furthermore, the data is not reasonably commensurate in scope with the scope of the claims. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218

USPQ 769, 777 (Fed. Cir. 1983). Specifically, the examples only utilize LDPE as the polyolefin and ultrafine polyamide fiber in only one amount.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Vickey Nerangis/
Primary Examiner, Art Unit 1796